

Amendments to the Claims:

This Listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for the conversion of a coal-containing feedstock to a gas product comprising methane, comprising contacting said coal feedstock with a treatment gas comprising at least about 40 weight percent H₂ at a reaction temperature of at least about 600°C for a time sufficient to convert at least about 90 percent of the volatile matter in the coal-containing feedstock to methane and form a purified carbon product wherein said treatment gas is formed by contacting a molten metal comprising iron with steam to form iron oxide.

2. (Original) A method as recited in Claim 1, wherein said coal feedstock comprises low-grade coal having a sulfur content of at least about 2 weight percent.

3. (Previously Presented) A method as recited in Claim 1, wherein said treatment gas comprises at least about 99 weight percent H₂.

4. (Cancelled Herein)

5. (Previously Presented) A method as recited in Claim 1, wherein said treatment gas comprises H₂ and CO.

6. (Cancelled Herein)

7. (Original) A method as recited in Claim 1, wherein said reaction temperature is from about 700°C to about 900°C.

8. (Original) A method as recited in Claim 1, further comprising the step of combusting at least a portion of said methane to generate electricity.

9. (Original) A method as recited in Claim 1, further comprising the step of combusting at least a portion of said methane in a combined cycle generator to generate electricity.

10. (Original) A method as recited in Claim 1, further comprising the step of reacting said purified carbon product and at least a portion of said methane in a boiler to generate electricity.

11. (Original) A method as recited in Claim 1, further comprising the step of diverting at least a portion of said treatment gas and combining said portion with said methane.

12-14. (Cancelled Herein)

15. (Withdrawn) A method as recited in Claim 12, further comprising the step of combusting at least a portion of said methane in a combined cycle generator.

16-23. (Previously Cancelled)

24. (New) A method as recited in Claim 1, wherein said step of contacting with steam is terminated and the iron oxide is reduced to iron.